ABSTRACT OF THE DISCLOSURE

An apparatus enables development and debugging of a control program for controlling a relatively small product having rapid response without using an actual mechanism. A simulation unit simulates an operation of a mechanism, in a simulation cycle shorter than a control cycle, for a time corresponding to the control cycle, and outputs a state variable of the mechanism to a holding circuit. When the state variable is held in the holding circuit, a simulation control unit makes the simulation unit shift to a response waiting state and makes a control program executing unit calculate a controlled variable. When the controlled variable is held in the holding circuit, the simulation control unit makes the control program execution unit shift to a response waiting state and makes the simulation unit initiate a simulating operation. The apparatus is applied when a control program for every product requiring a precise servo control is developed.